

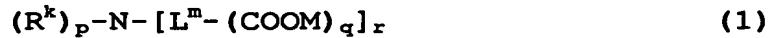
WHAT IS CLAIMED IS:

1. An ink containing a water, a water-soluble organic solvent, a dye, and a betaine compound.

5 2. The ink according to claim 1, further containing a nonionic surfactant.

3. The ink according to claim 2, wherein the betaine compound is a compound represented by the following formula

10 (1):



wherein R represents a hydrogen atom, an alkyl group, an aryl group or a heterocyclic group; L represents a divalent linking

15 group; M represents a hydrogen atom, an alkali metal atom, an ammonium group, a protonated organic amine- or nitrogen-containing heterocyclic group or a quaternary ammonium ion group, provided that when p+r is 4, one of M's is not present; q is an integer of 1 or more, r is an integer
20 of from 1 to 4, k is an integer of from 0 to 4, m is an integer of 1 or more, and p is an integer of from 0 to 4, provided that p+r is 3 or 4; in a case where p+r is 4, the N atom is a protonated ammonium atom; in a case where m is 2 or more, L's may be either the same or different; in a case where q is 2 or more, COOM's
25 may be either the same or different; in a case where r is 2

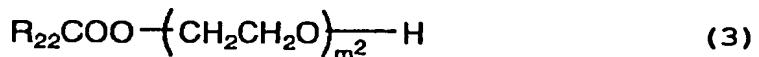
or more, L^m - $(COOM)_q$'s may be either the same or different; in a case where k is 2 or more, R' 's may be either the same or different; and in a case where p is 2 or more, R^k 's may be either the same or different.

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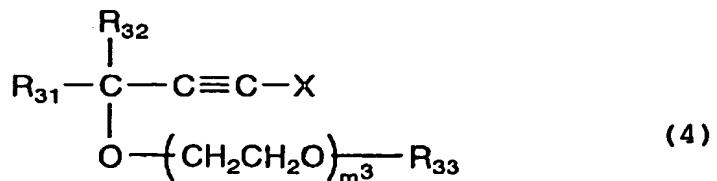
4. The ink according to claim 2, wherein the nonionic surfactant is a compound selected from compounds represented by the following formulae (2) to (4):



wherein R_{21} represents an alkyl group having from 5 to 40 carbon atoms; and m^1 represents an average number of ethylene oxide moles added which ranges from 2 to 40;

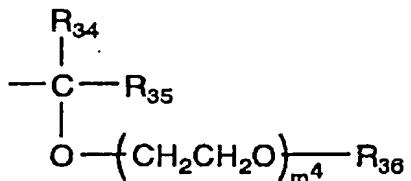


wherein R_{22} represents an alkyl group having from 5 to 40 carbon atoms; and m^2 represents an average number of ethylene oxide moles added which ranges from 2 to 40; and



25 wherein R_{31} and R_{32} each independently represent an alkyl group

having from 1 to 18 carbon atoms; R₃₃ represents a hydrogen atom, an alkyl group having from 1 to 6 carbon atoms or a phenyl group; and X represents a hydrogen atom or



wherein R₃₄ and R₃₅ each independently represent an alkyl group having from 1 to 18 carbon atoms; R₃₆ represents a hydrogen atom, an alkyl group having from 1 to 6 carbon atoms or a phenyl group;
10 and m³ and m⁴ each independently represent an average number of ethylene oxide moles added provided that m³+m⁴ is from 0 to 100;

in a case where m³ is 0, R₃₃ represents a hydrogen atom;
in a case where m⁴ is 0, R₃₆ represents a hydrogen atom; and
15 in a case where X is a hydrogen atom, m³ is from 1 to 100.

5. The ink according to claim 1, wherein the betaine compound is a compound which has both of a cationic site and an anionic site in its molecule.

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6. The ink according to claim 1, wherein the cationic site is selected from the group consisting of an amine form nitrogen atom, a nitrogen atom in an aromatic heterocycle, a boron atom having 4 carbon-bonds, and a phosphorus atom, and
25 the anionic site is selected from the group consisting of a

hydroxyl group, a thio group, a sulfonamido group, a sulfo group, a carboxyl group, an imido group, a phosphate group, and a phosphonate group.

5 7. The ink according to claim 1, wherein the dye has an oxidation potential nobler than 1.0 V (vs. SCE).

10 8. The ink according to claim 1, wherein the dye has at least two heterocyclic groups.

15 9. The ink according to claim 8, wherein the heterocyclic group is a 5-membered heterocyclic group or a 6-membered heterocyclic group in which hetero atom is at least one of N, O and S.

20 10. The ink according to claim 8, wherein the heterocyclic group contains at least one of pyridine, thiophene, thiazole, benzothiazole, benzoxazole and furan rings.

25 11. The ink according to claim 1, wherein the dye is a phthalocyanine dye containing at least one of -SO-, -SO₂-, -CO- and -CO₂-.

12. An ink set containing at least one of the ink according
25 to claims 2.

13. An inkjet recording method wherein an image is recorded with an inkjet printer by using at least one of the ink according to claim 2 and the ink set according to claim
5 12.

14. The ink according to claim 1, further containing at least one another betaine compound.

10 15. An ink set containing at least one of the ink according to claims 14.

15 16. An inkjet recording method wherein an image is recorded with an inkjet printer by using at least one of the ink according to claim 14 and the ink set according to claim
15. 15.